

2006 Fort Morgan Sea Turtle Nesting Summary

U.S. Fish and Wildlife Service, Bon Secour NWR

In 2006, there were 25 sea turtle nests on the Fort Morgan Peninsula (Figure 1), representing a mean nesting density of 1.1 nests/km. Of these nests, 15 were located within Bon Secour National Wildlife Refuge. Twenty-one of the 25 nests hatched including **A4, A5, A6, A7, A8, A9, A10, A11, A12, A13, A14, A15, A16, A17, A18, A19, A20, A21, A22, A23, and A25**.

Overall hatchability of nests was very high. Three nests (**A1, A2, and A3**) were destroyed by Tropical Storm Alberto, which made landfall on June 12 near Adams Beach, Florida. Nest **A24** was destroyed by high tides associated with a strong non-tropical storm on October 16. Sixty percent of nests were left in place (in situ) and were not relocated (Figure 2).

Excavations were performed for 23 nests. An estimated 1,901[†] hatchlings made it safely to the Gulf of Mexico, which is the most since 2002 (Figure 3). Survival of hatchlings (# to water / # of eggs) represents the highest percentage (66%) since at least 2001 (Figure 4). The mean incubation period for Fort Morgan nests was 56 days (compared to a mean of 62 days from 2003-2005) (Figure 5).

Special thanks to Team Leaders Sonja Sanders and Debi Gholson, Refuge Interns Jeff Kemper and Rachel Eustis, Refuge Volunteer Claudia Frosch, and the more than 40 Share the Beach volunteers who generously dedicated their valuable time for sea turtle conservation on the Fort Morgan Peninsula this season.

| ID # | Date found | Relocated | # Eggs | 1 st Emergence | # to water | Alive in nest ¹ | Dead in nest ² | Hatched | Dead embryo | Infertile | Survival (# to water / # eggs) (%) |
|-------|------------|-----------|------------------|---------------------------|------------|----------------------------|---------------------------|---------|-------------|-----------|------------------------------------|
| A-1* | 6/8/06 | No | 86 | ---- | 0 | 0 | 0 | 0 | 0 | 86 | 0 |
| A-2* | 6/11/06 | Yes | 135 | ---- | 0 | 0 | 0 | 0 | 0 | 135 | 0 |
| A-3* | 6/11/06 | No | 112 ³ | ---- | 0 | ---- | ---- | ---- | ---- | ---- | 0 |
| A-4 | 6/16/06 | No | 115 | 8/10/06 | 105 | 3 | 3 | 107 | 3 | 4 | 91 |
| A-5 | 6/26/06 | Yes | 101 | 8/22/06 | 92 | 0 | 0 | 94 | 0 | 7 | 91 |
| A-6 | 6/27/06 | Yes | 134 | 8/23/06 | 130 | 4 | 0 | 129 | 1 | 3 | 97 |
| A-7 | 6/29/06 | Yes | 133 | 8/21/06 | 52 | 1 | 3 | 57 | 5 | 68 | 39 |
| A-8 | 7/2/06 | No | 107 | 8/26/06 | 88 | 0 | 0 | 91 | 1 | 15 | 82 |
| A-9 | 7/3/06 | No | 121 | 8/26/06 | 110 | 0 | 0 | 110 | 1 | 10 | 90 |
| A-10 | 7/7/06 | No | 106 | ---- | 73 | 0 | 0 | 73 | 2 | 31 | 68 |
| A-11 | 7/8/06 | Yes | 112 | 8/30/06 | 107 | 2 | 3 | 107 | 0 | 2 | 95 |
| A-12 | 7/9/06 | No | 129 | 8/30/06 | 121 | 0 | 0 | 121 | 1 | 7 | 93 |
| A-13 | 7/13/06 | No | 103 | 9/4/06 | 98 | 0 | 0 | 98 | 1 | 4 | 95 |
| A-14 | 7/14/06 | No | 108 | 9/8/06 | 98 | 9 | 5 | 100 | 0 | 4 | 90 |
| A-15 | 7/15/06 | Yes | 105 | 9/9/06 | 101 | 1 | 1 | 102 | 1 | 2 | 96 |
| A-16 | 7/16/06 | Yes | 132 | 9/5/06 | 120 | 0 | 1 | 121 | 0 | 10 | 90 |
| A-17 | 7/18/06 | No | 148 | 9/11/06 | 130 | 9 | 12 | 140 | 0 | 6 | 87 |
| A-18 | 7/20/06 | No | 117 | 9/14/06 | ---- | 0 | 0 | 113 | 0 | 4 | ---- |
| A-19 | 7/25/06 | No | 89 | 9/15/06 | 73 | 1 | 5 | 83 | 1 | 4 | 82 |
| A-20 | 7/27/06 | Yes | 129 | 9/16/06 | 93 | 7 | 4 | 106 | 7 | 12 | 72 |
| A-21 | 8/2/06 | No | 104 | 10/7/06 | 19 | 1 | 1 | 19 | 0 | 81 | 18 |
| A-22 | 8/8/06 | Yes | 142 | 10/3/06 | 94 | 8 | 3 | 95 | 2 | 33 | 66 |
| A-23 | 6/26/06 | No | 125 | 8/18/06 | 108 | 1 | 1 | 121 | 0 | 1 | 86 |
| A-24* | 8/19/06 | No | 112 ³ | ---- | 0 | ---- | ---- | ---- | ---- | ---- | 0 |
| A-25 | 8/21/06 | Yes | 136 | 10/18/06 | 89 | 7 | 2 | 88 | 1 | 37 | 65 |

* destroyed by Tropical Storm Alberto on 6/12/06 (A1,A2,A3) or non-tropical storm on 10/16/06 (A24)

¹ includes hatchlings found alive or pipped live

² includes hatchlings found dead or pipped dead

³ estimated clutch size based on avg. for loggerheads (Van Buskirk and Crowder 1994)

[†] Nest A18 was excluded from survival estimates since the fate of hatchlings from this nest is unknown.

Figure 1. Sea turtle nests, Fort Morgan Peninsula, 2002-2006.

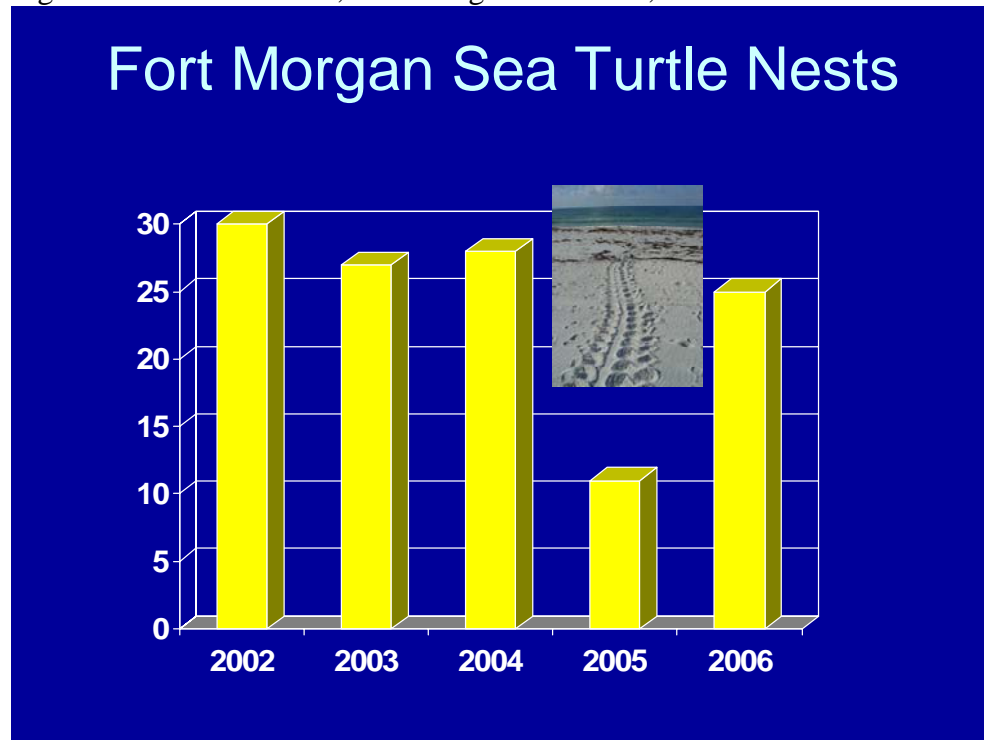


Figure 2. Relocated and In Situ (not relocated) Nests, Fort Morgan Peninsula, 2006.

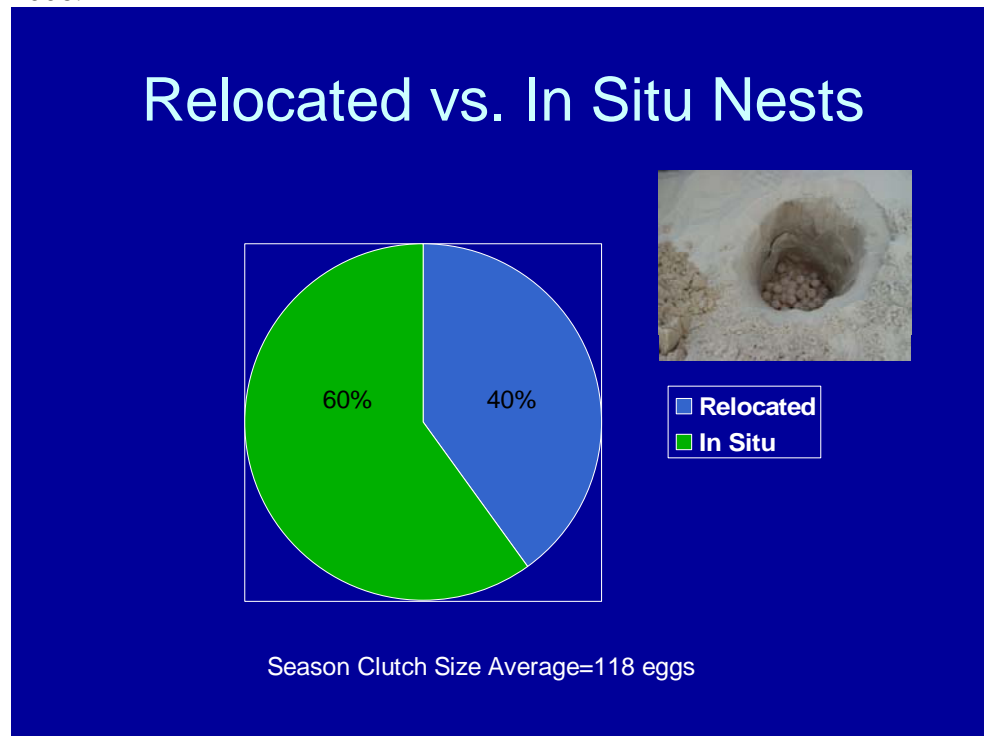


Figure 3. Estimated number of hatchlings that survived to reach the Gulf of Mexico, Fort Morgan Peninsula, 2002-2006.

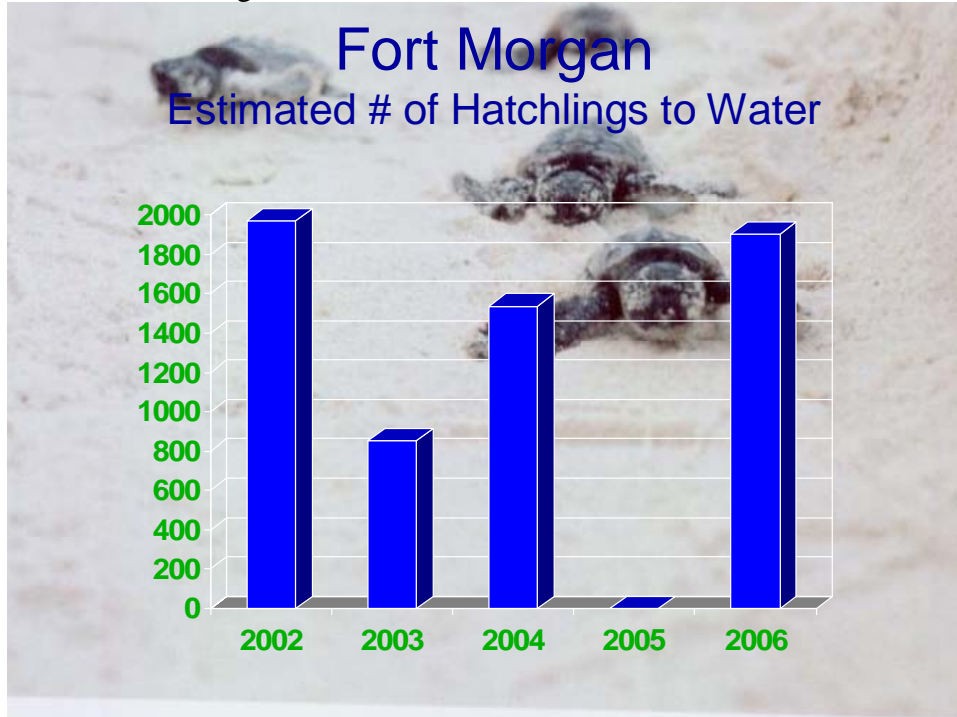


Figure 4. Estimated survival of sea turtle hatchlings (# to water/# of eggs), Fort Morgan Peninsula, 2002-2006.

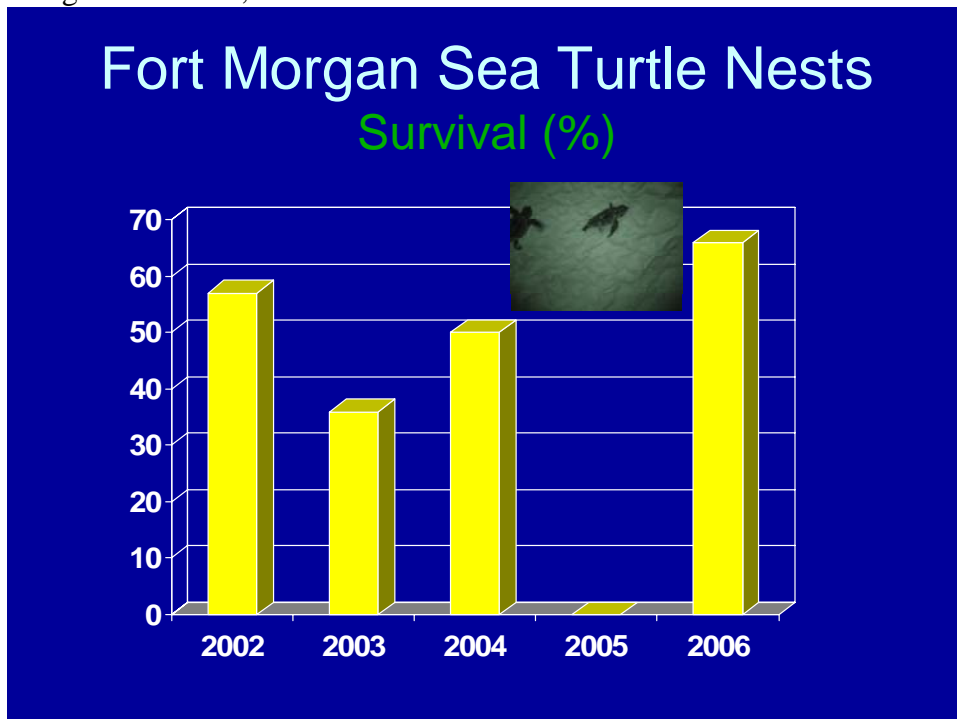


Figure 5. Incubation period by sea turtle nest, Fort Morgan Peninsula, 2006.

Fort Morgan Sea Turtle Nests Incubation Period--2006

Season Average=56 days

